

**OPTICAL SYSTEM LASER DRIVER WITH BUILT IN OUTPUT  
INDUCTOR FOR IMPROVED FREQUENCY RESPONSE**

**Abstract**

A laser driver comprises a PNP transistor current source, an inductor coupled to the PNP transistor current source, a switch coupled to the inductor, and a current sink coupled to the switch. The PNP transistor current source supplies a first current to a laser if the switch is closed and a second current to the laser if the switch is open. The PNP transistor current source, inductor, switch, and current sink are on a single semiconductor chip.